

REMARKS

This is being filed in response to the Office Action dated January 11, 2005. Claims 1-8, 14-17 and 24 are currently pending.

Claims 1 and 16 have been amended to recite that the modified TNF “consist essentially of” TNF covalently bound to PEG molecules.

Claims 1, 14, and 16 have been amended to recite that the modified TNF is TNF which kills Meth A tumors *in vivo*, as helpfully suggested by the Examiner. This amendment provides clarity to the term and suggests structural characteristics of a protein that has TNF activity as defined by the specification at page 5, lines 23-29. The claims provide structural context and an exemplary functional characteristic. The claimed modified TNF is useful in killing tumors and performing other functions of TNF.

The Examiner notes that all previous rejections have been overcome or withdrawn. The remarks herein pertain to the new formal matters, objections and/or rejections presented in the Office Action of January 11, 2005.

35 U.S.C. §102(b)

The Office Action rejects claims 1-5, 14-17, and 24 under 35 U.S.C. §102(b) as allegedly anticipated by U.S. Patent No. 5,292,802 to Rhee *et al.* (“Rhee”) as evidenced by U.S. Patent No. 5,677,171 to Hudziak *et al.* (“Hudziak”).

Claims 1 and 16 have been amended to recite that the modified TNF “consists essentially of” TNF covalently bound to PEG rather than comprising. Thus, the claims exclude further modifications that alter the essential character of the invention. Rhee contains long polymeric tubes which provide the essential structural feature of the Rhee invention. Claim 14 has not been so amended. Claim 14 is drawn to a method of increasing the circulating half life of TNF; the invention described by Rhee immobilizes any cytokine. Thus, the cytokine does not circulate in the bloodstream. This fundamental difference between Rhee and the claimed invention shows that claim 14 is not anticipated by Rhee as evidenced by Hudziak. Applicants respectfully submit that the claims are not anticipated by Rhee as evidenced by Hudziak, and respectfully request withdrawal of the rejection.

35 U.S.C. §103(a)

The Office Action rejects claims 1 and 5-7 under 35 U.S.C. §103(a) as allegedly obvious in view of U.S. Patent No. 5,292,802 to Rhee *et al.* (“Rhee”) in view of Tsutsumi *et al.* (1994) *Jap. J. Cancer Res.* 85:9-12 (“Tsutsumi”).

As discussed above the claims have been amended to distinguish over Rhee. Nothing in the teaching of Tsutsumi, as applied in the Office Action, overcomes the distinction over Rhee. Therefore, the claims are not obvious over Rhee in view of Tsutsumi. Applicants respectfully request withdrawal of the rejection.

The Office Action further rejects claims 1 and 8 as allegedly obvious in view of Rhee and Tsutsumi and further in view of Mark. Mark is noted for teaching that the TNF may be a mutated TNF as presently claimed. Nothing in the teachings of Mark, however, as applied in the Office Action, overcomes the distinction over Rhee in view of Tsutsumi as discussed above. Therefore, the claims as amended are not obvious over Rhee in view of Tsutsumi and further in view of Mark. Applicants respectfully request withdrawal of the rejection.

35 U.S.C. §112, first paragraph (written description)

The Office Action rejects claims 1-4, 14-17 and 24 under 35 U.S.C. §112, first paragraph, as allegedly failing to satisfy the written description requirement.

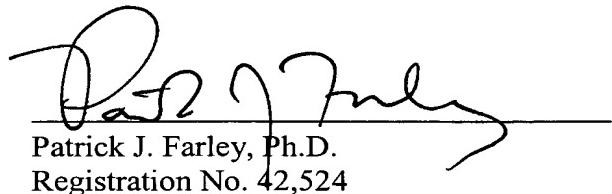
Claims 1, 14, and 16 have been amended to recite that the modified TNF is TNF that kills Meth A tumors *in vitro*, as helpfully suggested by the Examiner. This amendment provides clarity to the term and suggests structural characteristics of a protein that has TNF activity as defined by the specification at page 5, lines 23-29.

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Applicants respectfully submit that the claims are in condition for allowance, which action is respectfully requested.

Respectfully submitted,


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